In the claims:

Please cancel claims 2-49 without prejudice, and add new claims 50-59 as follows:

50. A method for inducing *ex vivo* proliferation of a population of T cells, comprising:

contacting a population of T cells *ex vivo* with a solid phase surface having covalently attached thereto:

(a) a first agent which provides a primary activation signal to the T cells, thereby activating the T cells; and

(b) a second agent which stimulates an accessory molecule on the surface of the T cells, thereby stimulating the activated T cells,

the first and second agents thereby inducing the population of T cells to proliferate.

51. The method of claim 50, wherein the first agent stimulates a TCR/CD3 complex-associated signal in the T cells.

52. The method of claim 50, wherein the first agent is an anti-CD3 antibody.

53. The method of claim 52, wherein the anti-CD3 antibody is an anti-human CD3 monoclonal antibody.

54. The method of claim 50, wherein the accessory molecule on the T cell is CD28.

55. The method of claim 54, wherein the second agent is an anti-CD28 antibody.

56. The method of claim 54, wherein the second agent is a stimulatory form of a natural ligand of CD28.

57. The method of claim 50, further comprising:

monitoring proliferation of the T cells; and

reactivating and re-stimulating the T cells with the first and second agents when the rate of T cell proliferation has decreased to induce further proliferation of the T cells.

58. The method of claim 57, wherein the step of monitoring proliferation of the T cells is by examining cells size or determining the level of expression of a cell surface molecule, and the step of reactivating and re-stimulating is initiated when T cell size has decreased or when the level of the cell surface molecule has decreased.